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The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. cancelled

2. cancelled

3. cancelled

4. cancelled

5. cancelled

6. cancelled

7. cancelled

8. cancelled

9. cancelled

10. cancelled

11. cancelled

12. (previously presented) A method of operation for a vehicle braking system including a driver activated brake pedal, a hydraulic brake pressure modulator, and an anti-lock brake control that activates the brake pressure modulator to modulate vehicle braking upon detection of an insipient wheel lock condition, the method comprising the steps of:

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periodically measuring vehicle deceleration and a brake pedal position during activation of the braking system when said insipient wheel lock condition is not detected;

identifying conditions of degraded braking effectiveness based on the periodically measured deceleration and brake pedal position;

adaptively adjusting a brake hydraulic pressure control parameter of said anti-lock brake control when a condition of degraded braking effectiveness is identified so as to compensate for the identified condition; and

wherein the condition of degraded braking effectiveness is determined by computing a rear speed difference between at least one front tire and at least one rear tire and comparing it to a pedal position dependent threshold value.

13. cancelled

14. cancelled

15. cancelled

16. (New) The method of Claim 12, wherein the anti-lock brake control releases and then re-applies brake pressure at a determined apply rate upon detection of an insipient wheel lock condition, and the step of adaptively adjusting a brake control parameter includes adjusting the determined apply rate in a manner to provide an increased rate of brake pressure application.

17. (New) The method of Claim 12, wherein the identified condition of degraded braking effectiveness further comprises excessive vehicle weight, and the measure of braking effectiveness degradation is determined according to an amount by which an estimate of vehicle weight exceeds a reference weight.

18. (New) The method of Claim 12, wherein the identified condition of degraded braking effectiveness further comprises fluid leakage, and the measure of braking effectiveness degradation is determined according to an estimated rate of the fluid leakage.

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19 (New) The method of Claim 12, wherein the step of adaptively adjusting a brake hydraulic pressure control parameter includes the steps of:

compensating the estimated road surface coefficient of friction for error due to the identified condition of degraded braking effectiveness; and

determining a brake apply rate based on the compensated estimate of road surface coefficient of friction and the measure of braking effectiveness degradation.

20. (New) The method of Claim 12, wherein the anti-lock brake control releases and then re-applies brake pressure at a determined apply rate upon detection of an insipient wheel lock condition, the method further including the steps of:

estimating a road surface coefficient of friction based on the periodically measured deceleration and brake pedal position;

determining said apply rate based on the estimated road coefficient of friction when conditions of degraded braking effectiveness are not identified; and

determining said apply rate based on the estimated road coefficient of friction and a measure of braking effectiveness degradation when the condition of degraded braking effectiveness is identified.